

AIRPLANE QUESTIONNAIRE

Name: _____ Grade: _____ CAPID: _____
Unit: _____ Date: 3/1/2007
Check Pilot: OHWG/DO Grade: _____ CAPID: _____
Score: _____ Type/Model Aircraft: N354CP C182T NAVIII G1000

Complete this open book questionnaire using the *Flight Manual/Pilot's Operating Handbook*. If a question or part of a question is not applicable, write in NA. The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1. Approved fuel grades and colors are: 100LL Blue, 100 Green
2. Location/capacity of each fuel tank is: Wings, 46 gal/side, 92 gal total
3. Total usable fuel under all flight conditions is 87 gallons.
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is 5.76 hours.
5. What make and grade oil is used? Winter: Exxon Elite 20W50 Summer: Exxon Elite 20W50
6. Oil capacity is 9 quarts. Minimum oil quantity for take off is 4 quarts.
7. Minimum oil pressure is 20 psi. Maximum oil pressure is 115.
8. Maximum oil temperature is 245 degrees (F or C) F.
9. Magnetos are checked at 1800 RPM. RPM drop should not exceed 175 RPM on either magneto or 50 RPM differential between magnetos.
10. Maximum RPM and MP for takeoff are 2450 and 29 in/Hg.
11. Maximum gross takeoff weight is 3100 pounds. Empty weight is 2073.8 pounds.
Useful load is 1036.2 pounds. Maximum landing weight is 2950 pounds.
12. Baggage compartment locations/weights are: A- 120 lb, B - 80 lb, C - 80 lb, ABC 200 lb max, BC 80 lb
13. Give the IAS at maximum gross weight for:

- | | |
|---|--|
| a. Va (maneuvering speed). <u>110</u> | e. Vx (best angle of climb, sea level). <u>65</u> |
| b. Vso (stall, landing config, power. off). <u>40</u> | f. Vmc (minimum control speed – multi-engine only). <u>N/A</u> |
| c. Vs1 (stall, cruise config, power. off). <u>50</u> | |
| d. Vy (best rate of climb, sea level). <u>80</u> | g. Best glide speed. <u>75</u> |

14. Give the immediate action/memory items for:

- a. Engine failure immediately after takeoff.

Airspeed 75 KIAS-Flaps up, 70 KIAS-Flaps down/AR, Mixture-IDLE CUTOFF, Fuel Selector-OFF, Magnetos-OFF, Stby Batt Sw-OFF, Master Sw (ALT&BAT)-OFF, Cabin Door-UNLATCH, Land-STRAIGHT AHEAD

- b. Fire during cranking and engine fails to start.

Throttle-FULL OPEN, Mixture-IDLE CUTOFF, Magnetos-START (continue cranking), Fuel Selector-OFF, Fuel Pump-OFF, Magneto-OFF, Stby Batt S-OFF, Master (ALT&BAT)-OFF, EVACUATE, Extinguish Fire.

- c. Engine fire in flight.

Mixture-IDLE CUTOFF, Fuel Selector-OFF, Fuel Pump-OFF, Stby BAtt sw-OFF, Cabin Heat & Air-OFF except overhead vent, Airspeed-100KIAS to higher to extinguish, Forced Landing-EXECUTE

- d. Electrical fire in flight.

Stby Batt sw-OFF, Master sw (ALT&BAT)-OFF, Vent & Cabin Heat & Air-CLOSED, Fire Ext-ACTIVATE, Avionics Sw (Bus 1 & Bus 2-OFF, All other switches except magnetos-OFF, Land ASAP

Continue on Reverse

Airplane Questionnaire (Continued)

15. Normal takeoff flap setting is 0-10 , short field takeoff setting is 20 , and soft field takeoff flap setting is 20 .

16. Maximum demonstrated takeoff/landing crosswind component is 15 knots.

17. Given: PA = 4,000 feet; Temp = 86° F; Runway 27; Wind 320° at 14 knots; runway is paved, level, and dry; aircraft is at maximum takeoff weight.

Find: Total takeoff distance to clear a 50-foot obstacle: 2264

18. Given: PA = 6,000 feet; Temp = 68° F; wind calm; runway is paved, level, and dry; aircraft is at maximum landing weight.

Find: Total landing distance to clear a 50-foot obstacle: 1615

19. Landing runway 22; wind 190° at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? No